

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S6	119	S5 and (reaction adj product)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 10:53
S5	296	acrylamide with succinimide and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 10:53
S9	2709	dispersant and pendant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 10:57
S11	5	dispersant with pendant with \$succinimide and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:05
S13	1	acrylamide with (mannich adj base adj adduct)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:11
S8	21	S6 and S7	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:11
S14	74	(mannich adj base adj adduct)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:12
S17	1	S16 and dispersant	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:15
S10	205	dispersant with pendant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:21
S19	9	dispersant with pendant with acrylamide and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:22
S18	103	S10 and acrylamide	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:22
S12	2	dispersant with pendant with \$succinic and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:22
S20	3	acrylamide near mannich with (reaction adj product) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:27
S16	59	acrylamide near mannich and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:27
S21	0	("reaction product of an acrylamide")	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 11:34

## EAST Search History

S22	481	acrylamide and dispersant and @ad<"20031231"	EPO; JPO; DERWENT	AND	ON	2006/08/21 11:37
S23	14	S22 and succin\$5	EPO; JPO; DERWENT	AND	ON	2006/08/21 11:48
S26	49	S25 not S23	EPO; JPO; DERWENT	AND	ON	2006/08/21 11:50
S25	51	S22 and amine	EPO; JPO; DERWENT	AND	ON	2006/08/21 11:50
S24	0	S22 and mannich	EPO; JPO; DERWENT	AND	ON	2006/08/21 11:50
S28	19	S26 not polymer	EPO; JPO; DERWENT	AND	ON	2006/08/21 11:51
S29	0	S26 and dispersant27 not S28	EPO; JPO; DERWENT	AND	ON	2006/08/21 12:04
S27	49	S26 and dispersant	EPO; JPO; DERWENT	AND	ON	2006/08/21 12:04
S30	30	S27 not S28	EPO; JPO; DERWENT	AND	ON	2006/08/21 12:09
S32	31	(pendant adj acrylamide) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:11
S31	7	succinimide and pendant	EPO; JPO; DERWENT	AND	ON	2006/08/21 12:11
S34	7	(bis-succinimide adj dispersant) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:27
S33	23	S32 and (succin\$5 or amine or mannich)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:27
S35	0	bis-succinimide near pendant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:28
S36	5	bis-succinimide with pendant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:33
S39	19	S38 and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:40
S38	266	acrylamide with mannich and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:40
S37	9	S5 and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:40

## EAST Search History

S42	132	S38 and (reaction adj product)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:43
S43	93	S42 not S39 not S16	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 12:46
S45	401	dimethylaminoethylacrylamide	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:42
S44	6	S43 not polymer	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:42
S48	3	S46 and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:43
S46	340	S45 and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:43
S47	71	S46 and dispersant	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:44
S7	33	S5 and dispersant	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:50
S49	1	1992-341410.NRAN.	DERWENT	AND	ON	2006/08/21 13:51
S51	1	aminothioazole and acrylamide	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:55
S50	0	aminothioazole with acrylamide	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:55
S52	98600	polyacrylamide	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:58
S55	233	polyacrylamide and "508".clas. and succin\$5 and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:59
S54	0	polyacrylamide and "508".clas. and succin\$5and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:59
S53	300	polyacrylamide and "508".clas. and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 13:59
S56	1	(polyacrylamide with dispersant) and "508".clas. and succin\$5 and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:13

## EAST Search History

S57	65	(titratable adj nitrogen)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:14
S61	8	carlisle.in. and "508".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO	AND	ON	2006/08/21 14:30
S60	1116	carlisle.in.	US-PGPUB; USPAT; USOCR; EPO; JPO	AND	ON	2006/08/21 14:30
S59	0	carlisle-william.in.	US-PGPUB; USPAT; USOCR; EPO; JPO	AND	ON	2006/08/21 14:30
S58	3	("5397489").URPN.	USPAT	AND	ON	2006/08/21 14:30
S63	559	(viscosity adj index) and imidazole	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:37
S62	1	"5652201".pn.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:37
S64	471	(viscosity adj index) and imidazole and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:38
S66	718	(viscosity adj index) and phenothiazine and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:41
S65	8	(viscosity adj index) with imidazole and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:41
S67	40	(viscosity adj index) with phenothiazine and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:44
S68	1	"4305834".pn.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/21 14:49
S69	2	wo-9612746-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/21 14:53
S71	11	1-vinyl-2-pyrrolidinone with phenothiazine	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/21 14:54

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S72	9	1-vinyl-2-pyrrolidinone with phenothiazine and @ad<"20031231"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/21 14:56
S73	8	1-vinyl-2-pyrrolidinone with phenothiazine and @ad<"20031231" and esters	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/21 14:57
S74	2	1-vinyl-2-pyrrolidinone with phenothiazine and @ad<"20031231" and styrene-maleic	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/21 16:32
S75	18	vinylpiperidine and (viscosity adj index) @ad<"20031231"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/21 16:43
S76	5	(("4732942") or ("4863623") or ("5075383") or ("5112508") or ("5238588")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/21 16:52
S77	10	(("5814586") or ("5663126") or ("5523008") or ("5294354") or ("4810754") or ("4769043") or ("4715975") or ("4146489") or ("4170561") or ("4092255")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/21 16:53
S79	102	lambert.in. and (internal adj combustion)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 10:03
S80	1	("5888947").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/22 10:55
S81	1	("4234435").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/22 10:57
S82	2	("3272746").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/22 10:59
S86	0	"polyisobutylene to succinic acid ratio"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 11:16
S85	0	"polybutylene to succinic acid ratio"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 11:16
S87	0	"polyisobutylene to succinic" near ratio and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 11:17

## EAST Search History

S89	1	1978-65592A.NRAN.	DERWENT	AND	ON	2006/08/22 11:25
S88	1	gb-1565627-\$ did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/22 11:25
S84	119	polyisobutylene with succinic with ratio and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 11:25
S90	11	\$bisacrylamide with dispersant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 15:46
S94	16	S93 and \$ethylacrylamide	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 15:52
S93	111	(dispersant adj monomer) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 15:54
S95	8	(dispersant adj monomer) polyacrylamide and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 15:57
S96	655	acrylamide and \$bisacrylamide and dispersant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 15:58
S97	47	S96 not copolymer	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:01
S99	1	(acrylamide and polyacrylamide) with (viscosity adj index) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:03
S98	0	(acrylamide and \$bisacrylamide) with (viscosity adj index) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:03
S10 1	340	(acrylate) with (viscosity adj index) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:04
S10 2	0	(\$bisacrylamide) with (viscosity adj index) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:17
S10 3	6	(acrylamide) with (viscosity adj index adj improver) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:29
S10 0	11	(acrylamide) with (viscosity adj index) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:29

## EAST Search History

S10 5	6	(("6107257") or ("5238588") or ("5112508") or ("5075383") or ("4863623") or ("4732942")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/22 16:40
S10 4	1	(acrylamide) with (VI adj improver) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:50
S11 0	7	polymethacrylamide and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:51
S10 9	341	polyacrylamide and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:51
S10 8	0	polacrylamide and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:51
S10 7	46	\$bisacrylamide and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 16:54
S11 1	23	(acrylamide with viscosity) and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 17:14
S70	474	1-vinyl-2-pyrrolidinone	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/22 17:34
S11 3	1	("4092255").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/22 17:38
S11 2	3	1-vinyl-2-pyrrolidinone with (viscosity adj index)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	AND	ON	2006/08/22 17:38
S11 4	16	("3182024"   "3360506"   "3378492"   "3404091"   "3423367"   "3445387"   "3488294"   "3728319").PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/22 17:41
S4	20	acrylamide near dispersant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 09:08
S11 7	494	S116 and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 09:55
S11 6	660	(acrylamide) and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 09:55

## EAST Search History

S10 6	660	(acrylamide) and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 09:55
S11 8	44	dispersant with (pendant adj group) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 11:21
S11 5	59	((N-vinyl adj imidazole) or (1-vinyl-2-pyrrolidone) or (N-allyl adj imidazole) or (allyl adj amines) or (1-vinyl adj pyrrolidone) or (2-vinyl adj pyridine) or (4-vinyl adj pyridine) or (N-methyl-N-vinyl adj acetamide) or (diallyl adj formamide) or (N-methyl-N-allyl adj formamide) or (N-ethyl-N-allyl formamide) or (N-cyclohexyl-N-allyl formamide) or (4-methyl-5-vinyl adj thiazole) or (N-allyl adj diisoctyl adj phenothiazine) or (2-methyl-1-vinylimidazole) or (3-methyl-1-vinylpyrazole) or (N-vinyl adj purine) or (N-vinyl adj piperazines) or (N-vinyl adj succinimide) or (vinylpiperidines) or vinylmorpholines or N-arylphenylenediamines) with ((viscosity adj index) or (VI)) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 11:38
S12 1	59	((N-vinyl adj imidazole) or (1-vinyl-2-pyrrolidone) or (N-allyl adj imidazole) or (allyl adj amines) or (1-vinyl adj pyrrolidone) or (2-vinyl adj pyridine) or (4-vinyl adj pyridine) or (N-methyl-N-vinyl adj acetamide) or (diallyl adj formamide) or (N-methyl-N-allyl adj formamide) or (N-ethyl-N-allyl formamide) or (N-cyclohexyl-N-allyl formamide) or (4-methyl-5-vinyl adj thiazole) or (N-allyl adj diisoctyl adj phenothiazine) or (2-methyl-1-vinylimidazole) or (3-methyl-1-vinylpyrazole) or (N-vinyl adj purine) or (N-vinyl adj piperazines) or (N-vinyl adj succinimide) or (vinylpiperidines) or vinylmorpholines or N-arylphenylenediamines) with ((viscosity adj index) or (VI)) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 11:39

## EAST Search History

S12 0	150	((N-vinyl adj imidazole) or (1-vinyl-2-pyrrolidone) or (N-allyl adj imidazole) or (allyl adj amines) or (1-vinyl adj pyrrolidone) or (2-vinyl adj pyridine) or (4-vinyl adj pyridine) or (N-methyl-N-vinyl adj acetamide) or (diallyl adj formamide) or (N-methyl-N-allyl adj formamide) or (N-ethyl-N-allyl formamide) or (N-cyclohexyl-N-allyl formamide) or (4-methyl-5-vinyl adj thiazole) or (N-allyl adj diisooctyl adj phenothiazine) or (2-methyl-1-vinylimidazole) or (3-methyl-1-vinylpyrazole) or (N-vinyl adj purine) or (N-vinyl adj piperazines) or (N-vinyl adj succinimide) or (vinylpiperidines) or vinylmorpholines or N-arylphenylenediamines) and "508".clas. and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 11:39
S12 2	133	S120 not S121	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 14:26
L3	474	L2 and additive	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 14:26
L2	494	L1 and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 14:26
L4	0	(acrylamide near additive) and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 14:33
L1	660	(acrylamide) and "508".clas.	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 14:33
L10	1	1981-17294D.NRAN.	DERWENT	AND	ON	2006/08/23 14:35
L16	1	1992-341410.NRAN.	DERWENT	AND	ON	2006/08/23 14:40
S41	19	S39 not S16	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 15:08
L22	16	(acrylamide adj dispersant) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 15:08
S92	2	(diethylaminoethyl adj acrylamide) with dispersant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 15:12
L24	15	(diethylaminoethyl adj acrylamide) and "508".clas. and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 15:12

## EAST Search History

L23	15	(diethylaminoethyl adj acrylamide) and "508".clas. and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 15:12
S91	1	(dimethylaminopropyl adj acrylamide) with dispersant and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 15:13
L25	18	(dimethylaminopropyl adj acrylamide) and "508".clas. and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 15:18
L27	1	("4732942").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/23 16:16
L26	8	24 not 25	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 16:16
L29	13	508/291.ccls. and acrylamide	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 16:59
L31	129	508/291.ccls. and (viscosity adj index) and @ad<"20031231"	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 17:00
L30	169	508/291.ccls. and (viscosity adj index)	US-PGPUB; USPAT; USOCR	AND	ON	2006/08/23 17:00